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Pioneer Hi-Bred International, Inc.

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<213> Zea mays

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<213> Zea mays

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Tyr Glu Val Ile Tyr Thr Pro Thr Asp Ile Tyr Val Val Met Glu Tyr
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<213> Glycine max

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His Ala Arg Asn Leu Lys Thr Gly Gln His Val Ala Met Lys Val Val
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Gly Lys Glu Lys Val Ile Lys Val Gly Met Met Glu Gln Val Lys Arg
      50              55              60

Glu Ile Ser Val Met Lys Met Val Lys His Pro Asn Ile Val Glu Leu
      65              70              75              80

His Glu Val Met Ala Ser Lys Ser Lys Ile Tyr Ile Ser Ile Glu Leu
      85              90              95

Val Arg Gly Gly Glu Leu Phe Asn Lys Val Ser Lys Gly Arg Leu Lys
      100             105             110

Glu Asp Leu Ala Arg Leu Tyr Phe Gln Gln Leu Ile Ser Ala Val Asp
      115             120             125

Phe Cys His Ser Arg Gly Val Tyr His Arg Asp Leu Lys Pro Glu Asn
      130             135             140

Leu Leu Leu Asp Glu His Gly Asn Leu Lys Val Ser Asp Phe Gly Leu
      145             150             155             160

Thr Ala Phe Ser Asp His Leu Lys Glu Asp Gly Leu Leu His Thr Thr
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Cys Gly Thr Pro Ala Tyr Val Ser Pro Glu Val Ile Ala Lys Lys Gly
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 Tyr Asp Gly Ala Lys Ala Asp Ile Trp Ser Cys Gly Val Ile Leu Tyr
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 Val Leu Leu Ala Gly Phe Leu Pro Phe Gln Asp Asp Asn Leu Val Ala
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 Met Tyr Lys Lys Ile His Arg Gly Asp Phe Lys Cys Pro Pro Trp Phe
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 Ser Leu Asp Ala Arg Lys Leu Val Thr Lys Leu Leu Asp Pro Asn Pro
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 Ser Glu Thr Lys Val Arg Leu Gln Gly Gln Glu Arg Gly Arg Lys Gly
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 Lys Leu Ala Ile Ala Ala Asp Ile Tyr Ala Val Thr Pro Ser Phe Met
 370 375 380
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 <213> Glycine max

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 <213> Glycine max

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 35 40 45
 Ile Leu Asn Arg Arg Lys Ile Lys Asn Met Glu Met Glu Glu Lys Val
 50 55 60
 Arg Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His Pro His Ile Ile
 65 70 75 80
 Arg Leu Tyr Glu Val Ile Glu Thr Pro Thr Asp Ile Tyr Val Val Met
 85 90 95
 Glu Tyr Val Lys Ser Gly Glu Leu Phe Asp Tyr Ile Val Glu Lys Gly
 100 105 110
 Arg Leu Gln Glu Asp Glu Ala Arg Asn Phe Phe Gln Gln Ile Ile Ser
 115 120 125

Gly	Val	Glu	Tyr	Cys	His	Arg	Asn	Met	Val	Val	His	Arg	Asp	Leu	Lys	130	135	140
Pro	Glu	Asn	Leu	Leu	Leu	Asp	Ser	Lys	Cys	Asn	Val	Lys	Ile	Ala	Asp	145	150	155
Phe	Gly	Leu	Ser	Asn	Ile	Met	Arg	Asp	Gly	His	Phe	Leu	Lys	Thr	Ser	165	170	175
Cys	Gly	Ser	Pro	Asn	Tyr	Ala	Ala	Pro	Glu	Val	Ile	Ser	Gly	Lys	Leu	180	185	190
Tyr	Ala	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Cys	Gly	Val	Ile	Leu	Tyr	195	200	205
Ala	Leu	Leu	Cys	Gly	Thr	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Pro	Asn	210	215	220
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Met	Arg	Arg	Met	Thr	Ile	Pro	Glu	Ile	Arg	Gln	His	Pro	Trp	Phe	Gln	260	265	270
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Gly	Phe	Asn	Gln	Met	His	Ser	Ser	Glu	Leu	Ala	Ser	Ser	Val	Val	Gly	355	360	365
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Gln	Phe	Pro	Val	Glu	Arg	Lys	Trp	Ala	Leu	Gly	Leu	Gln	Ser	Arg	Ala	385	390	395
His	Pro	Arg	Glu	Ile	Met	Thr	Glu	Val	Leu	Lys	Ala	Leu	Gln	Glu	Leu	405	410	415
Asn	Val	Cys	Trp	Lys	Lys	Ile	Gly	His	Tyr	Asn	Met	Lys	Cys	Arg	Trp	420	425	430
Val	Ala	Gly	Ile	Pro	Gly	His	His	Glu	Gly	Met	Val	Asn	Asn	Asn	Val	435	440	445

His Ser Asn His Tyr Phe Gly Asp Asp Ser Asn Ile Ile Glu Asn Asp
 450 455 460
 Ala Val Ser Thr Ser Asn Val Val Lys Phe Glu Val Gln Leu Tyr Lys
 465 470 475 480
 Thr Arg Glu Glu Lys Tyr Leu Leu Asp Leu Gln Arg Val Gln Gly Pro
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Val Leu

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 <212> DNA
 <213> Glycine max

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<212> PRT

<213> Glycine max

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aatgcagttc ctttgttggg ggttcttcta attgcacttc acgtcttcgc tttggtgtat 2280
tggtttata gattggccac tgacaataag ccacaacagc agcagcagct acaacaacag 2340
caacagcaac atcaacagag aacaaaggct cactgaccga caacaacaac aacaacaaca 2400
acaaacgttc tcattcaatt tcattttctt caaacaattg ttgtatgaaa ttgttaattg 2460
tgtgcagtaa aggatatgat ttttttggtt ttttggtata acagtgatga atgaagtttt 2520
gtttaatttt taaaaaaaaa aaa 2543

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<210> 16
<211> 515
<212> PRT
<213> Glycine max

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<400> 16
Met Asp Arg Ser Thr Gly Arg Gly Gly Gly Gly Ser Val Asp Met Phe
 1          5          10          15

Leu Arg Asn Tyr Lys Leu Gly Lys Thr Leu Gly Ile Gly Ser Phe Gly
      20          25          30

Lys Val Lys Ile Ala Glu His Val Arg Thr Gly His Lys Val Ala Ile
      35          40          45

Lys Ile Leu Asn Arg His Lys Ile Lys Asn Met Glu Met Glu Glu Lys
      50          55          60

Val Arg Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His His His Ile
      65          70          75          80

Ile Arg Leu Tyr Glu Val Val Glu Thr Pro Thr Asp Ile Tyr Val Val
      85          90          95

Met Glu Tyr Val Lys Ser Gly Glu Leu Phe Asp Tyr Ile Val Glu Lys
      100         105         110

Gly Arg Leu Gln Glu Asp Glu Ala Arg His Phe Phe Gln Gln Ile Ile
      115         120         125

Ser Gly Val Glu Tyr Cys His Arg Asn Met Val Val His Arg Asp Leu
      130         135         140

Lys Pro Glu Asn Leu Leu Leu Asp Ser Lys Phe Asn Ile Lys Ile Ala
      145         150         155         160

Asp Phe Gly Leu Ser Asn Ile Met Arg Asp Gly His Phe Leu Lys Thr
      165         170         175

Ser Cys Gly Ser Pro Asn Tyr Ala Ala Pro Glu Val Ile Ser Gly Lys
      180         185         190

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Leu	Tyr	Ala	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Cys	Gly	Val	Ile	Leu	195	200	205
Tyr	Ala	Leu	Leu	Cys	Gly	Thr	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Pro	210	215	220
Asn	Leu	Phe	Lys	Lys	Ile	Lys	Gly	Gly	Ile	Tyr	Thr	Leu	Pro	Ser	His	225	230	235
Leu	Ser	Pro	Gly	Ala	Arg	Asp	Leu	Ile	Pro	Arg	Met	Leu	Val	Val	Asp	245	250	255
Pro	Met	Lys	Arg	Met	Thr	Ile	Pro	Glu	Ile	Arg	Gln	His	Pro	Trp	Phe	260	265	270
Gln	Val	His	Leu	Pro	Arg	Tyr	Leu	Ala	Val	Pro	Pro	Pro	Asp	Thr	Leu	275	280	285
Gln	Gln	Ala	Lys	Lys	Ile	Asp	Glu	Glu	Ile	Leu	Gln	Glu	Val	Val	Asn	290	295	300
Met	Gly	Phe	Asp	Arg	Asn	Gln	Leu	Val	Glu	Ser	Leu	Ser	Asn	Arg	Ile	305	310	315
Gln	Asn	Glu	Gly	Thr	Val	Thr	Tyr	Tyr	Leu	Leu	Leu	Asp	Asn	Arg	Phe	325	330	335
Arg	Val	Ser	Ser	Gly	Tyr	Leu	Gly	Ala	Glu	Phe	Gln	Glu	Thr	Met	Asp	340	345	350
Ser	Gly	Phe	Asn	Arg	Met	His	Ser	Gly	Glu	Val	Ala	Ser	Pro	Val	Val	355	360	365
Gly	His	His	Ser	Thr	Gly	Tyr	Met	Asp	Tyr	Gln	Gly	Val	Gly	Met	Arg	370	375	380
Gln	Gln	Phe	Pro	Val	Glu	Arg	Lys	Trp	Ala	Leu	Gly	Leu	Gln	Ser	Arg	385	390	395
Ala	Gln	Pro	Arg	Glu	Ile	Met	Thr	Glu	Val	Leu	Lys	Ala	Leu	Gln	Glu	405	410	415
Leu	Asn	Val	Cys	Trp	Lys	Lys	Ile	Gly	His	Tyr	Asn	Met	Lys	Cys	Arg	420	425	430
Trp	Val	Ala	Gly	Thr	Ala	Gly	His	His	Glu	Gly	Met	Ile	Asn	Asn	Ser	435	440	445
Leu	His	Ser	Asn	His	Tyr	Phe	Gly	Asn	Asp	Ser	Gly	Ile	Ile	Glu	Asn	450	455	460
Glu	Ala	Val	Ser	Lys	Ser	Asn	Val	Val	Lys	Phe	Glu	Val	Gln	Leu	Tyr	465	470	475
Lys	Thr	Arg	Glu	Glu	Lys	Tyr	Leu	Leu	Asp	Leu	Gln	Arg	Val	Gln	Gly	485	490	495
Pro	Gln	Phe	Leu	Phe	Leu	Asp	Leu	Cys	Ala	Ala	Phe	Leu	Ser	Gln	Leu	500	505	510

Arg Val Leu
515

<210> 17
<211> 1869
<212> DNA
<213> Glycine max

<400> 17
gcacgaggtc tggttgcata gcattggttg gtagttgtct caaaaatctc ttcttgccct 60
ttggccataa tcaaaagcca agacactggt catcacagctg ctcaattatc aagccaacct 120
tgctcgggtc cactgcagaa tttcagttta ttcttatcta gctcaattct gggtgtgggt 180
ttatctctta ctggaagaca gactttgagg tagactcctt ataagtgcgc agaagttcaa 240
gtgtagagaa tgagtcagcc taagattaaa cgccgagttg gtaaatacga ggtggggagg 300
accattggtg aaggtacatt tgcaaagggt aaatttgcaa ggaactctga gacaggagag 360
cccgtggctc ttaaaattct tgacaaggag aagggtgctaa agcacaagat ggctgagcag 420
atcaggagag aagtagctac aatgaaacta atcaagcatc caaatgttgt tcgattgtat 480
gaggtcatgg gaagcaagac caaaatatat attgttttgg agtttgtaac tgggggggaa 540
ctctttgaca aaattgtaaa ccatggaagg atgagtgaag atgaagcacg tagatatattc 600
cagcagctta taaatgctgt tgattattgc catagcaggg gtgtctacca cagagacctg 660
aagccagaaa atttgctatt agatacttat gggaacctta aagtttctga ttttggtttg 720
agtgcctctc cccagcaagt tagggatgat ggacttcttc atactacatg tggcactcca 780
aattatgttg ctctgaggt ccttaacgat agaggctatg atggggcaac tgcagacttg 840
tgggtcatgtg gggttattct ctttgatttg gttgcagggt acttgccctt cgacgacct 900
aatcttatga acctgtataa aaagatctca gctgctgaat ttacttgccc cccatggctt 960
tctttcactg ccaggaaatt gattacacga atcttggatc cagatcccac cactcgtatc 1020
actatacctg agattttgga tgatgaatgg ttaagaaag aatataagcc tcccatTTTT 1080
gaggagaatg gggaaatcaa cctcgatgat gttgaagctg tctttaaaga ctctgaagag 1140
caccatgtga cagagaaaaa agaagagcag cctacagcca tgaatgcatt tgagttaatc 1200
tccatgtcca aaggactgaa ccttgaaaac ttgtttgata ctgagcaggg atttaaaagg 1260
gaaacaagat tcacctcaaa atccctgcg gatgagataa tcaacaagat tgaggaagcc 1320
gcaaaacctc ttggctttga tgtgcagaag aaaaattaca agatgaggct tgcaaatgtg 1380
aaagctggaa ggaagggaaa ccttaatgtt gccacagaga tatttcaagt ggcaccttct 1440
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aagaaacttt caacaagcct ggatgatgtt gtttggaaaa cagaagatga tatgcaaagt 1560
cgagaaacaa agtgatgtgg atattattat cattgtctat taagtgtaat tttcttcgtg 1620
tctgaggttt tactattttc caatttcttc attcgttata ttctcccccc gtaggtttgt 1680
ttggacatta attacatagt actcatttat tgcataccat gctattattt tttgaaagca 1740
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aaaaaaaaa 1869

<210> 18
<211> 441
<212> PRT
<213> Glycine max

<400> 18
Met Ser Gln Pro Lys Ile Lys Arg Arg Val Gly Lys Tyr Glu Val Gly
1 5 10 15
Arg Thr Ile Gly Glu Gly Thr Phe Ala Lys Val Lys Phe Ala Arg Asn
20 25 30
Ser Glu Thr Gly Glu Pro Val Ala Leu Lys Ile Leu Asp Lys Glu Lys
35 40 45
Val Leu Lys His Lys Met Ala Glu Gln Ile Arg Arg Glu Val Ala Thr
50 55 60

Met 65	Lys	Leu	Ile	Lys	His 70	Pro	Asn	Val	Val	Arg 75	Leu	Tyr	Glu	Val	Met 80
Gly	Ser	Lys	Thr	Lys 85	Ile	Tyr	Ile	Val	Leu 90	Glu	Phe	Val	Thr	Gly 95	Gly
Glu	Leu	Phe	Asp 100	Lys	Ile	Val	Asn	His 105	Gly	Arg	Met	Ser	Glu	Asn	Glu
Ala	Arg	Arg	Tyr	Phe	Gln	Gln	Leu 120	Ile	Asn	Ala	Val	Asp 125	Tyr	Cys	His
Ser 130	Arg	Gly	Val	Tyr	His	Arg 135	Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Leu
Asp 145	Thr	Tyr	Gly	Asn	Leu 150	Lys	Val	Ser	Asp	Phe 155	Gly	Leu	Ser	Ala	Leu 160
Ser	Gln	Gln	Val	Arg 165	Asp	Asp	Gly	Leu	Leu 170	His	Thr	Thr	Cys	Gly 175	Thr
Pro	Asn	Tyr	Val 180	Ala	Pro	Glu	Val	Leu 185	Asn	Asp	Arg	Gly	Tyr	Asp	Gly
Ala	Thr	Ala	Asp 195	Leu	Trp	Ser	Cys 200	Gly	Val	Ile	Leu	Phe 205	Val	Leu	Val
Ala 210	Gly	Tyr	Leu	Pro	Phe	Asp 215	Asp	Pro	Asn	Leu	Met 220	Asn	Leu	Tyr	Lys
Lys 225	Ile	Ser	Ala	Ala	Glu 230	Phe	Thr	Cys	Pro	Pro	Trp 235	Leu	Ser	Phe	Thr 240
Ala	Arg	Lys	Leu	Ile 245	Thr	Arg	Ile	Leu	Asp 250	Pro	Asp	Pro	Thr	Thr	Arg
Ile	Thr	Ile	Pro 260	Glu	Ile	Leu	Asp 265	Asp	Glu	Trp	Phe	Lys	Lys 270	Glu	Tyr
Lys	Pro	Pro	Ile 275	Phe	Glu	Glu	Asn 280	Gly	Glu	Ile	Asn	Leu	Asp 285	Asp	Val
Glu 290	Ala	Val	Phe	Lys	Asp 295	Ser	Glu	Glu	His	His 300	Val	Thr	Glu	Lys	Lys
Glu 305	Glu	Gln	Pro	Thr	Ala 310	Met	Asn	Ala	Phe	Glu 315	Leu	Ile	Ser	Met	Ser 320
Lys	Gly	Leu	Asn 325	Leu	Glu	Asn	Leu	Phe	Asp 330	Thr	Glu	Gln	Gly	Phe 335	Lys
Arg	Glu	Thr	Arg 340	Phe	Thr	Ser	Lys	Ser 345	Pro	Ala	Asp	Glu	Ile 350	Ile	Asn
Lys	Ile	Glu	Glu	Ala	Ala	Lys 355	Pro	Leu	Gly	Phe	Asp 360	Val 365	Gln	Lys	Lys
Asn 370	Tyr	Lys	Met	Arg	Leu	Ala 375	Asn	Val	Lys	Ala	Gly 380	Arg	Lys	Gly	Asn

Leu Asn Val Ala Thr Glu Ile Phe Gln Val Ala Pro Ser Leu His Met
385 390 395 400

Val Glu Val Arg Lys Ala Lys Gly Asp Thr Leu Glu Phe His Lys Phe
405 410 415

Tyr Lys Lys Leu Ser Thr Ser Leu Asp Asp Val Val Trp Lys Thr Glu
420 425 430

Asp Asp Met Gln Met Arg Glu Thr Lys
435 440

<210> 19
<211> 817
<212> DNA
<213> Triticum aestivum

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gaacattagg tataggcaca tttggaaaag tgaggattgc agagcataag catacagggc 180
ataaagttgc tataaagatt ctgaaccgtc gtcaaattgag aactatggaa atggaggaga 240
aagcaaagag agagatcaag atattgaggt tgttcatcca ccctcatatc atccggcttt 300
atgaggtcat ttacacacct acagatatat ttgttgtgat ggaatattgc aagtatgggtg 360
agctattcga ctgcattgtt gagaaagggc ggttacagga agatgaggct cgtcgaatct 420
tccagcagat tatatctggt gttgaatact gccacagaaa catggttgct catcgtgatc 480
taaagccaga gaacctgtta cttgattcca aatacaatgt gaaacttgcc gactttgggt 540
taagtaatgt catgcatgat ggccattttc tgaagactag ctgcgggagt ccaaactatg 600
ctgcaccaga ggttatctca ggtaaattat acgctggacc tgaggttgat gtttgaggct 660
gcgggggtgat actttatgct cttctttgtg gcactcttcc atttgatgat gacaatatc 720
ccaaactgtt caaaaagata aaggagggca tctatatcct tccaagtcac ttatctgctc 780
ctgcaagga ttgatccaag aatgcttggt gttgatc 817

<210> 20
<211> 244
<212> PRT
<213> Triticum aestivum

<400> 20
Met Glu Gly Asn Thr Arg Gly Gly Gly His Ser Asp Ala Leu Lys Asn
1 5 10 15
Tyr Asn Val Gly Arg Thr Leu Gly Ile Gly Thr Phe Gly Lys Val Arg
20 25 30
Ile Ala Glu His Lys His Thr Gly His Lys Val Ala Ile Lys Ile Leu
35 40 45
Asn Arg Arg Gln Met Arg Thr Met Glu Met Glu Glu Lys Ala Lys Arg
50 55 60
Glu Ile Lys Ile Leu Arg Leu Phe Ile His Pro His Ile Ile Arg Leu
65 70 75 80
Tyr Glu Val Ile Tyr Thr Pro Thr Asp Ile Phe Val Val Met Glu Tyr
85 90 95
Cys Lys Tyr Gly Glu Leu Phe Asp Cys Ile Val Glu Lys Gly Arg Leu
100 105 110

Gln Glu Asp Glu Ala Arg Arg Ile Phe Gln Gln Ile Ile Ser Gly Val
 115 120 125
 Glu Tyr Cys His Arg Asn Met Val Ala His Arg Asp Leu Lys Pro Glu
 130 135 140
 Asn Leu Leu Leu Asp Ser Lys Tyr Asn Val Lys Leu Ala Asp Phe Gly
 145 150 155 160
 Leu Ser Asn Val Met His Asp Gly His Phe Leu Lys Thr Ser Cys Gly
 165 170 175
 Ser Pro Asn Tyr Ala Ala Pro Glu Val Ile Ser Gly Lys Leu Tyr Ala
 180 185 190
 Gly Pro Glu Val Asp Val Trp Ser Cys Gly Val Ile Leu Tyr Ala Leu
 195 200 205
 Leu Cys Gly Thr Leu Pro Phe Asp Asp Asp Asn Ile Pro Lys Leu Phe
 210 215 220
 Lys Lys Ile Lys Gly Gly Ile Tyr Ile Leu Pro Ser His Leu Ser Ala
 225 230 235 240
 Pro Ala Arg Asp

<210> 21
 <211> 2006
 <212> DNA
 <213> Triticum aestivum

<400> 21
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 tggggattgg ttcgttcggg aaggtcaaga ttgccgagca tataaaaact ggtcacaagg 180
 tggccgtcaa gatccttaac cgccggaaaa tcaaaaacat ggagatggaa gagaaagtga 240
 aaagagagat caagatatta agattattca tgcacccaca tatcatccgc ctttatgaag 300
 tgatagaggc accagctgat atttatgtgg ttatggagta tggttaagtct ggtgaattgt 360
 ttgattacat tggtgagaaa ggtaggctac aggaggaaga ggcccgcgct ttctttcaac 420
 agatcatatc tgggtgttcaa tattgccaca ggaacatggt ggtgcaccgc gatctaaagc 480
 cggagaacct tcttttgac aataattgtg atgttaagat tgcggatttt ggcttaagta 540
 atgttatgcg tgacggccac tttcttaaga caagttgtgg tagcccaaata tatgcagctc 600
 cggagggttat atctggaaaa ctgtacgctg ggcctgaagt tgatgtatgg agctgcggtg 660
 ttattcttta tgctcttcta tgtggtactc ttccatttga tgatgagaac ataccacaacc 720
 tttttaagaa aataaagggt ggaatatata ccttccaag ccatttatca ggcccagcaa 780
 gggatttgat tccaaggatg ctagttgttg atcctatgaa gaggataacc attcgtgaaa 840
 tacgcgagca tccatggttt gaagctcaac tcccacgata tttagccgtg cctccaccag 900
 atactgcaca acaagttaaa aagattgatg aagaatctct tggttaaagtt atcagtctgg 960
 gatttgacaa aaacctgctg gttgaatcaa ttcataatag attgcaaaat gaggcaacag 1020
 ttgcatatta tttgtttttg gataataaga gtcgcacaac aactggctat cttggagctg 1080
 ggtatcaaga agctatggaa tcgtctttct caccattac tccaagtga acacaaagtc 1140
 cagctcatgg aaatcggcaa caaccatata tggaatctcc agttggcttg agaccacatt 1200
 ttccagctga taggaaatgg gctcttgggc ttcagtctcg agcacatcca agagaagtta 1260
 tgactgaagt gctgaaggct ctgcaagaac tgaatgtata ctggaaaaaa attggacact 1320
 ataacatgaa atgtagatgg agtcctcctg gctttcccgg tcaggagaat atgaatcata 1380
 ccaattataa cttcagtgcg gagcctattg aaaccgacga cctgggtgac aagttaaatt 1440
 taattaagtt cgaacttcag ctttacaaaa caagagatga gaaatacctt ctggatttgc 1500
 aaagggcgag cgggccgcat ctccctcttc ttgatctatg tgccgccttt ctagctcagc 1560
 tgagagtctt ttgataccag atgtgcccga ggaatgtatg ttgtatcact ctaaagagat 1620


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gtaaatagca agctttctcc agcggatcaa agtcgtggag tatgtagaca tgcggagctg 1680
ttgtgtgctt atttcggcgc ctatatgctg aatttagacc tggcaggggc gggcaagtga 1740
agcaagcaag gaactattgc catcagggtta tttccagctg ccgccaaagg cactaggata 1800
tagaagtatt actgattaat cctatatattg ccccttgga catactccta ctctactgct 1860
gtttacttgc atgtaatttt tactgtcttg gtctccagac cagaccacgt acacgaataa 1920
tttcttcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1980
aaaaaaaaaa aaaaaaaaaa aaaaaa                                     2006

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<210> 22
<211> 523
<212> PRT
<213> Triticum aestivum

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<400> 22
Pro Arg Arg Arg Cys Arg Tyr Ala Ser Pro Arg Glu Ala Ser Pro Ala
 1          5          10          15

Ala Arg Trp Lys Met Glu Thr Gly Gly Lys Asp Gly Asn Pro Leu Lys
          20          25          30

Asn Tyr Arg Ile Gly Lys Thr Leu Gly Ile Gly Ser Phe Gly Lys Val
          35          40          45

Lys Ile Ala Glu His Ile Lys Thr Gly His Lys Val Ala Val Lys Ile
          50          55          60

Leu Asn Arg Arg Lys Ile Lys Asn Met Glu Met Glu Glu Lys Val Lys
          65          70          75          80

Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His Pro His Ile Ile Arg
          85          90          95

Leu Tyr Glu Val Ile Glu Ala Pro Ala Asp Ile Tyr Val Val Met Glu
          100          105          110

Tyr Val Lys Ser Gly Glu Leu Phe Asp Tyr Ile Val Glu Lys Gly Arg
          115          120          125

Leu Gln Glu Glu Glu Ala Arg Arg Phe Phe Gln Gln Ile Ile Ser Gly
          130          135          140

Val Gln Tyr Cys His Arg Asn Met Val Val His Arg Asp Leu Lys Pro
          145          150          155          160

Glu Asn Leu Leu Leu Asp Asn Asn Cys Asp Val Lys Ile Ala Asp Phe
          165          170          175

Gly Leu Ser Asn Val Met Arg Asp Gly His Phe Leu Lys Thr Ser Cys
          180          185          190

Gly Ser Pro Asn Tyr Ala Ala Pro Glu Val Ile Ser Gly Lys Leu Tyr
          195          200          205

Ala Gly Pro Glu Val Asp Val Trp Ser Cys Gly Val Ile Leu Tyr Ala
          210          215          220

Leu Leu Cys Gly Thr Leu Pro Phe Asp Asp Glu Asn Ile Pro Asn Leu
          225          230          235          240

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Phe Lys Lys Ile Lys Gly Gly Ile Tyr Thr Leu Pro Ser His Leu Ser
245 250 255
Gly Pro Ala Arg Asp Leu Ile Pro Arg Met Leu Val Val Asp Pro Met
260 265 270
Lys Arg Ile Thr Ile Arg Glu Ile Arg Glu His Pro Trp Phe Glu Ala
275 280 285
Gln Leu Pro Arg Tyr Leu Ala Val Pro Pro Pro Asp Thr Ala Gln Gln
290 295 300
Val Lys Lys Ile Asp Glu Glu Ser Leu Val Lys Val Ile Ser Leu Gly
305 310 315 320
Phe Asp Lys Asn Leu Leu Val Glu Ser Ile His Asn Arg Leu Gln Asn
325 330 335
Glu Ala Thr Val Ala Tyr Tyr Leu Phe Leu Asp Asn Lys Ser Arg Thr
340 345 350
Thr Thr Gly Tyr Leu Gly Ala Gly Tyr Gln Glu Ala Met Glu Ser Ser
355 360 365
Phe Ser Pro Ile Thr Pro Ser Glu Thr Gln Ser Pro Ala His Gly Asn
370 375 380
Arg Gln Gln Pro Tyr Met Glu Ser Pro Val Gly Leu Arg Pro His Phe
385 390 395 400
Pro Ala Asp Arg Lys Trp Ala Leu Gly Leu Gln Ser Arg Ala His Pro
405 410 415
Arg Glu Val Met Thr Glu Val Leu Lys Ala Leu Gln Glu Leu Asn Val
420 425 430
Tyr Trp Lys Lys Ile Gly His Tyr Asn Met Lys Cys Arg Trp Ser Pro
435 440 445
Pro Gly Phe Pro Gly Gln Glu Asn Met Asn His Thr Asn Tyr Asn Phe
450 455 460
Ser Ala Glu Pro Ile Glu Thr Asp Asp Leu Gly Asp Lys Leu Asn Leu
465 470 475 480
Ile Lys Phe Glu Leu Gln Leu Tyr Lys Thr Arg Asp Glu Lys Tyr Leu
485 490 495
Leu Asp Leu Gln Arg Ala Ser Gly Pro His Leu Leu Phe Leu Asp Leu
500 505 510
Cys Ala Ala Phe Leu Ala Gln Leu Arg Val Phe
515 520
<210> 23
<211> 512
<212> DNA
<213> Zea mays

<400> 23
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catagagggg ggaggcgcg cgagatggg gggcggtggc ggcggcgggc cgctgcggcg 120
ggtgggcaag tacgaggtgg gacgcacat cggggaaggc accttcgcca aggtcaagtt 180
cgcgcagaac accgagaccg gggagagcgt cgccatgaag gtgctcgacc gctcctccat 240
cctcaagaac aagatggccg aacagattaa gagagaaata tccataatga agcttggtcag 300
gcatcccaat gtcgttaggc tacacgaggt tttggcaagc cggaagaaga tatttataat 360
tctggagttc atcactggcg gcgagctatt cgataaaatt attcgtcatg ggagactcag 420
tgaagcagat gcccgagat actttcagca gcttattgat ggtgttgatt tttgtcacia 480
gaaaggagtc taccatcgag acttaaagcc tg 512

<210> 24
<211> 132
<212> PRT
<213> Zea mays

<400> 24
Arg Arg Val Gly Lys Tyr Glu Val Gly Arg Thr Ile Gly Glu Gly Thr
1 5 10 15
Phe Ala Lys Val Lys Phe Ala Gln Asn Thr Glu Thr Gly Glu Ser Val
20 25 30
Ala Met Lys Val Leu Asp Arg Ser Ser Ile Leu Lys Asn Lys Met Ala
35 40 45
Glu Gln Ile Lys Arg Glu Ile Ser Ile Met Lys Leu Val Arg His Pro
50 55 60
Asn Val Val Arg Leu His Glu Val Leu Ala Ser Arg Lys Lys Ile Phe
65 70 75 80
Ile Ile Leu Glu Phe Ile Thr Gly Gly Glu Leu Phe Asp Lys Ile Ile
85 90 95
Arg His Gly Arg Leu Ser Glu Ala Asp Ala Arg Arg Tyr Phe Gln Gln
100 105 110
Leu Ile Asp Gly Val Asp Phe Cys His Lys Lys Gly Val Tyr His Arg
115 120 125
Asp Leu Lys Pro
130

<210> 25
<211> 552
<212> DNA
<213> Glycine max

<220>
<221> unsure
<222> (385)

<400> 25
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taatcaaaag ccaagacact gttcatacag ctgctcaatt atcaagccaa ccttgctcgg 120
ttccactgca gaatttcagt ttattcttat ctagctcaat tctggttgtg gggttatctc 180
ttactggaag acagactttg aggtagactc cttataagtg cgcagaagtt caagtgtaga 240
gaatgagtca gcctaagatt aaacgccgag ttggtaaata cgaggtgggg aggaccattg 300
gtgaaggtag atttgcaaag gtgaaatttg caaggaactc tgagacagga gagccgtggc 360

tcttaaaatt cttgacaagg agaangtgct aaagcacaag atggctgagc agatcaggag 420
agaagtagct acaatgaaac taatcaagca tccaaatggt gttcgattgt atgaagtcac 480
gggaagcaag acaaataatat aatgttttgg agttgtactg ggggggaacc cttgcaaatt 540
gtaacccatgg aa 552

<210> 26
<211> 77
<212> PRT
<213> Glycine max

<220>
<221> UNSURE
<222> (39)

<400> 26
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Lys Phe Leu Thr Arg Arg Xaa Val Leu Lys His Lys Met Ala Glu Gln
35 40 45
Ile Arg Arg Glu Val Ala Thr Met Lys Leu Ile Lys His Pro Asn Val
50 55 60
Val Arg Leu Tyr Glu Val Met Gly Ser Lys Thr Asn Ile
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tggggattgg ttcgttcggg aaggtcaaga ttgccgagca tataaaaact ggtcacaang 180
tggccgtcaa gatccttaac cgccggcaaa tcaaaaacat ggcgatggaa gagaangtgn 240
caagagagat caagatatta agattattca tgcacccaca tatcatccgc ctttatnaag 300
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1 5 10 15
Lys Val Lys Ile Ala Glu His Ile Lys Thr Gly His Xaa Val Ala Val
20 25 30
Lys Ile Leu Asn Arg Arg Gln Ile Lys Asn Met Ala Met Glu Glu Xaa
35 40 45
Val Xaa Arg Glu Ile Lys Ile Leu Arg Leu Phe Met His Pro His Ile
50 55 60
Ile Arg Leu Tyr Xaa Val Ile Glu Ala Pro Xaa Asp Ile Tyr Val Xaa
65 70 75 80
Met Xaa Tyr Val Lys
85